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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,711	11/30/2001	Roland Boss	10007748-1	3684

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

NGO, HOANG X

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/996,711

**Applicant(s)**

BOSS, ROLAND

**Examiner**

Hoang Ngo

**Art Unit**

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-9,12-16 and 18-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-9,12-16 and 18-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Azar et al.

Azar et al discloses a fuser assembly 15 comprising a fuser roller 23 having a heat absorptive outer layer 28 on an inner core 27 of a thermally isolating material (col. 4, lines 53-68). Azar et al discloses at column 4, lines 23-25 a radiant heating element (quartz lamp) adjacent and externally to the outer layer of the roller.

Azar et al further discloses at column 5, lines 3-20 that the outer layer comprising a metal layer (i.e. iron oxide) having a thickness of less than 3 millimeters (3 to 12 mils) and the inner core is fabricated from a foamed material (col. 4, line 54).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2852

4. Claims 4-6, 13-16, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azar in view of Hartley et al.

As discussed above, Azar et al discloses every aspect of Applicant's claimed invention except for a pair of temperature transducers and a controller to detect and maintain the temperature of the fuser roller to a predetermined level.

Hartley et al disclose fusing apparatus having a plurality of transducers 39 (col. 7, line 27) and a controller 37 for the purpose of detecting and maintaining a desired surface temperature on a fuser roller (col. 7, lines 27-30).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Hartley et al to the fixing device of Azar et al so that the surface temperature on the fixing roller can be maintained at a desired level.

5. Claims 7-8, 12, 18-25, and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azar et al in view of Onishi et al.

As discussed above, Azar et al disclose every aspect of Applicant's claimed invention except for a heat reflector to direct at least a portion of heat radiated by a heat array toward the fusing roller and a printing media to preheat the printing media prior to engaging the fusing roller.

Onishi et al disclose a fusing apparatus having a heat reflector 71a (Fig. 2) for directing a portion of heat radiated by a heat array 71 toward a fusing roller 50 and a printing media 40 prior engaging with the fusing roller.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Onishi et al into the fixing device of Azar et al so that adequate fixing heating can be applied to fuse the toner on the printing media.

6. Claims 29 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azar et al in view of Takeuchi et al.

As discussed above, Azar et al disclose every aspect of Applicant's claimed invention except for the roller comprising a skeletal inner structure having rib extending radially from a central shaft.

Takeuchi et al disclose a fixing roller having reinforcing rib 17c extending radially from a central shaft 17a (Fig. 7, 8).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Takeuchi et al to the device of Azar et al since the device of Takeuchi et al would provide the fixing roller with sufficient rigid strength.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 4-9, 12-16, and 18-40 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Ngo whose telephone number is (571) 272-2138. The examiner can normally be reached on 6:00am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (703) 308-1373. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2852

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoang Ngo  
Primary Examiner  
Art Unit 2852

Hxn